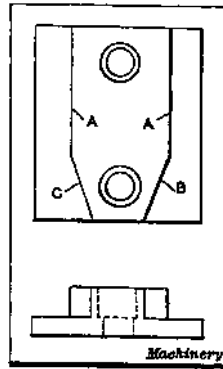


shows how the angular slots may be finished. This type of fixture can be used for all kinds of angles, as holes can be placed where desired from zero to its full capacity.



Fixture arranged for Lateral and Angular Adjustment. — A fixture designed for milling the sides of the block shown in Fig. 9 is illustrated by the plan view, Fig. 10.

Three operations are involved; the parallel sides *A* are milled by means of the straddle cutters and the two sides *B* and *C* are then milled in two subsequent operations. These three operations are all performed without requiring more than one setting of the work. The block is cut off from bar stock, and drilled and counterbored to receive two fillister-head screws which hold it in place on the machine of which it forms a part. These holes are also utilized for holding the block in position on the fixture.

Fig. 9. Piece which is milled on Sides *A*, *B*.

The milling fixture consists of an upper plate *A* which is pivoted on the stud *B*. This stud is mounted in the cross-slide *C* which operates on the base *D*. The plate *A* is provided with two tapped steel bushings which are a forced fit in holes drilled and counterbored for the purpose. These bushings receive the two screws which secure the work in position on the fixture, their purpose being to prevent the rapid wear of the threads which would take place if they were tapped directly into the cast iron. The fixture is shown in the illustration set in position for milling the parallel sides *A* of the work.

There are two tapered pins *E* and *F* which are used for locating the work in the required position. For milling the parallel sides of the work, the pin *F* is inserted in the hole *N* to locate the cross-slide *C* in the required position. Similarly the pin *E* is located in the central hole to locate the swivel plate *A*. These pins are merely used to locate the fixture, the bolts *G* and *H* being provided to secure it in the required position. When the fixture is set for milling the angular side *C* of the work, the pin *E* is inserted in the hole